DEVELOPING AN INTEGRATED DATA ENVIRONMENT AND KNOWLEDGE-CENTRIC ORGANIZATION

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Introduction

The need to create a digital infrastructure that will provide a seamless flow of information has resulted in a natural shift from computer desktop systems to an integrated data environment (IDE) and a knowledge-centric organization. This shift is underway in the Program Executive Office for Aviation (PEO, Aviation) at Redstone Arsenal, AL. An IDE will allow an organization to perceive and react to its environment in a timely, effective, and efficient manner.

A knowledge-dominant environment is critical to conducting efficient business processes with both internal and external business partners. An environment in which knowledge is easily accessible and shared will provide a decisive edge because people will be integrated with technology. Benefits will be realized not only in terms of cost savings, but also in having a more intelligent and efficient workforce.

Integrated Data Environment

An IDE is a natural outgrowth of the need for seamless business and information flow, which is the lifeblood of a successful business. By centralizing information and making real-time data readily available, an organization can better respond to environmental challenges and requirements. Intranet and Internet systems and tools will facilitate customer interface by establishing seamless links between internal and external business contacts. As data flow is maximized, business cycles are compressed and simplified. The ultimate result is improved strategies for business operations.

Strategy

PEO, Aviation has implemented a strategy for an IDE and knowledge-centric organization that is evolutionary. Because the effort is immense, it has both short- and long-term goals. A structured approach is critical not only in the conversion of legacy systems and ways of doing business, but also in gaining the commitment and changing the mindset of individuals. The IDE and knowledge management effort avoids the use of rigid rules and management hierarchies. At the heart of the effort are working groups, which are structured to give optimum time and attention to completing projects.

Three main groups were formed: the IDE Overarching Integrated Product Team (OIPT), the Integrated Product Team (IPT), and the Working Integrated Product Teams (WIPTs). The OIPT is composed of the PEO's top management personnel and is the final voting authority on all issues and decisions pertinent to the IDE and knowledge management effort. The IPT is composed of members from each program management office (PMO) and the Information Management Office (IMO) and is the liaison between the OIPT and the WIPTs. The IPT, a results-driven group, maintains the momentum of the IDE effort by meeting regularly to review status reports from the WIPTs and to discuss proposed actions and recommended solutions.

After interviews with each PMO to determine critical and immediate issues requiring resolution, 10 informal WIPTs were formed to address the following issues: Engineering Drawings with Boeing; ASAALT (Assistant Secretary of the Army for Acquisition, Logistics and Technology) Mandate Paperless Acquisition 2002; Electronic File Management; Workflow Manager; ECP (Engineering Change Proposal) Processing; Electronic Signatures; CITIS/CIDS (Contractor Integrated Technical Information Service/Contractor Integrated Data Services); Paperless Contracting Mandate 2000 (includes Contract Data Requirements Lists); Integrated Master Calendar; and the PEO, IMO Initiatives. Each WIPT has a process lead, a technical lead, and members from the PMO seeking resolution. Additionally, each working group has outlined a plan to resolve any problem or issue.

Ideologies

Comprehensive identification of business requirements and the consideration of organizational culture are two primary ideologies PEO, Aviation recognizes as intrinsic to IDE and the knowledge management strategy.

Also central to the WIPT strategy are thorough business processes and requirement definitions. Defining requirements will include process innovation as conventional methods are converted or streamlined. This will help optimize and integrate technological solutions with human resources. The IMO will be instrumental in researching recommended solutions to ensure that they meet requirements and interface with existing technologies and external customers. Rapidly changing technology requires a hands-on approach to discover the correct, requirements-driven solution.

People represent the heart and soul of any successful business, and knowledge sharing is a human behavior, not a technological tool. Therefore, any technological solution to a business need must include a change in the workforce mindset. People must be convinced of the enhancements and benefits of an enterprise solution. Negative responses must be transitioned into positive actions.

Conclusion

PEO, Aviation is proud to share its beliefs on knowledge management and its development of the IDE effort. The integration of technology and human resources is an unbeatable equation for success, and the PEO is fortunate to have project managers who know the benefits of information technology and are willing to commit resources in the pursuit of improvements. Our future as a superior military fighting force in the next millennium depends on evolving management of our business efficiencies.

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